

TOAST 2022 - Categories & Weighting

Weighting %	Measures	Calculated by	Value Range	Range		Normalized Value	Multiplier	Max Score
				Min	Max			
30.0%	Bottlenecks	Passthrough SUM of all Bottleneck Impact Factors where a bottleneck impacts a TOAST corridor <i>Impact Factor = Avg duration (minutes) x Avg max length x Number occurrences</i>	0-62,550+	0	1,800	10	2.0	20
				1,800	2,600	9		
				2,600	3,800	8		
				3,800	6,250	7		
				6,250	9,350	6		
				9,350	18,450	5		
				18,450	23,550	4		
				23,550	29,050	3		
				29,050	40,600	2		
				40,600	62,550	1		
				62,550		0		
		Origination Point SUM of Bottleneck Impact Factors where the bottleneck originated in the TOAST corridor <i>Impact Factor = Avg duration (minutes) x Avg max length x Number occurrences</i>	0-13,650+	0	450	10	1.0	10
				450	600	9		
				600	800	8		
				800	1,250	7		
				1,250	1,950	6		
				1,950	3,750	5		
				3,750	4,550	4		
				4,550	5,650	3		
				5,650	7,950	2		
				7,950	13,650	1		
				13,650		0		

Weighting %	Measures	Calculated by	Value Range	Range		Normalized Value	Multiplier	Max Score
				Min	Max			
30.0%	Travel Time and Speed	Travel Time Performance (TTP) % of time speeds are within 90% of Reference Speed <i>TTP(%) = % where TTI/RTT >= 0/9</i>	0-100%	0%	66%	0	1.5	15
				66%	72%	1		
				72%	76%	2		
				76%	80%	3		
				80%	82%	4		
				82%	85%	5		
				85%	88%	6		
				88%	91%	7		
				91%	94%	8		
				94%	98%	9		
				98%	100%	10		
		Travel Time Index (TTI) <i>TTI = 80th Percentile Travel Time (for time of day) ÷ 50th Percentile Travel Time (all time)</i>	0-2+	0.00	1.10	10	1.5	15
				1.10	1.20	9		
				1.20	1.30	8		
				1.30	1.40	7		
				1.40	1.50	6		
				1.50	1.60	5		
				1.60	1.70	4		
				1.70	1.80	3		
				1.80	1.90	2		
				1.90	2.00	1		
				2.00		0		

Weighting %	Measures	Calculated by	Value Range	Range		Normalized Value	Multiplier	Max Score
				Min	Max			
15.0%	TSMO Safety	Percent Rear End Crashes % = $\frac{\text{Rear End Crashes}^*}{\text{Total Crashes}^*}$ *3 years crash data	0-45%+	0%	2.5%	10	1.0	10
				2.5%	7.5%	9		
				7.5%	12.5%	8		
				12.5%	17.5%	7		
				17.5%	22.5%	6		
				22.5%	30.0%	5		
				30.0%	32.5%	4		
				32.5%	35.0%	3		
				35.0%	40.0%	2		
				40.0%	45.0%	1		
				45.0%		0		
		Crash Severity Impact Crash Impact Factor = $\frac{(3 \text{ year Total Number Crashes} \times \text{V/C Ratio} \times \text{Fatal/Severe Ratio})}{\div \text{corridor length}}$	0-90+	0	0.2	10	0.5	5
				0.2	0.70	9		
				0.70	1.4	8		
				1.4	2.5	7		
				2.5	4.2	6		
				4.2	7	5		
				7	11	4		
				11	18	3		
				18	30	2		
				30	58	1		
				58		0		

Weighting %	Measures	Calculated by	Value Range	Range		Normalized Value	Multiplier	Max Score
				Min	Max			
15.0%	Traffic Incident Management	Incident Clearance Sum Duration of all Crash Clearance Times (minutes) X Clustering ratio	0-3700+	0	90	10	0.75	7.5
				90	150	9		
				150	240	8		
				240	300	7		
				300	420	6		
				420	600	5		
				600	780	4		
				780	1020	3		
				1020	1500	2		
				1500	2520	1		
				2520		0		
		Secondary Crashes Ratio of Secondary Incidents to Total (%)	0-23%+	0%	4%	10	0.75	7.5
				4%	5%	9		
				5%	6%	8		
				6%	7%	7		
				7%	8%	6		
				8%	10%	5		
				10%	11%	4		
				11%	13%	3		
				13%	15%	2		
				15%	20%	1		
				20%		0		

Weighting %	Measures	Calculated by	Value Range	Range		Normalized Value	Multiplier	Max Score
				Min	Max			
10.0%	Traffic Volume Data	Volume per Lane <i>Number Vehicles per lane per mile</i>	0 - 30,500+	0	1,900	10	0.5	5
				1,900	2,400	9		
				2,400	3,000	8		
				3,000	3,600	7		
				3,600	4,400	6		
				4,400	5,400	5		
				5,400	6,900	4		
				6,900	9,400	3		
				9,400	12,900	2		
				12,900	16,700	1		
				16,700		0		
		Freight Corridor <i>Percent Trucks (%) per mile</i>	0-22%+	0%	5%	10	0.5	5
				5%	6%	9		
				6%	7%	8		
				7%	8%	7		
				8%	10%	6		
				10%	11%	5		
				11%	13%	4		
				13%	15%	3		
				15%	20%	2		
				20%	25%	1		
				25%		0		